

Synthesis of Information on Evidence-Based Practices for School Improvement: 20 Studies and Tools Focused on Evidence-Based Practices in School Improvement



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Goal and Purpose of the Resource Review

Goal and Purpose: The goal of this document is to present a synthesis of resources and offer a literature base on evidence-based practices in school improvement. The tools and resources that are included can be utilized by State educational agencies (SEAs), local educational agencies (LEAs), schools, and school-level stakeholders to support an evidence-based decision-making cycle in the selection and implementation of evidence-based interventions for school improvement.

Organization of this Document

This document is organized into two parts:

1. Background and Framework for Resource Review : Provides an explanation of the background on evidence-based decision-making cycle and the framework and criteria used to review the resources.
2. Resources by Topic: Provides a table of the resources with a summary of the intervention and the evidence base organized by topical area and followed by a topic-specific bibliography. Within each topic, some resources are further highlighted because they may be particularly relevant during one phase of the evidence-based decision-making cycle as SEAs and LEAs choose and implement interventions to improve outcomes for students.

Background for Resource Review: Evidence-Based Decision-Making Cycle

This resource review focused on identifying tools and resources that may be useful as SEAs and LEAs follow steps of an evidence-based decision-making cycle (see figure) to identify and implement interventions to improve outcomes for students.

The resources and tools included here are not exhaustive, but can serve as a starting point for further review and identification of evidence-based interventions.

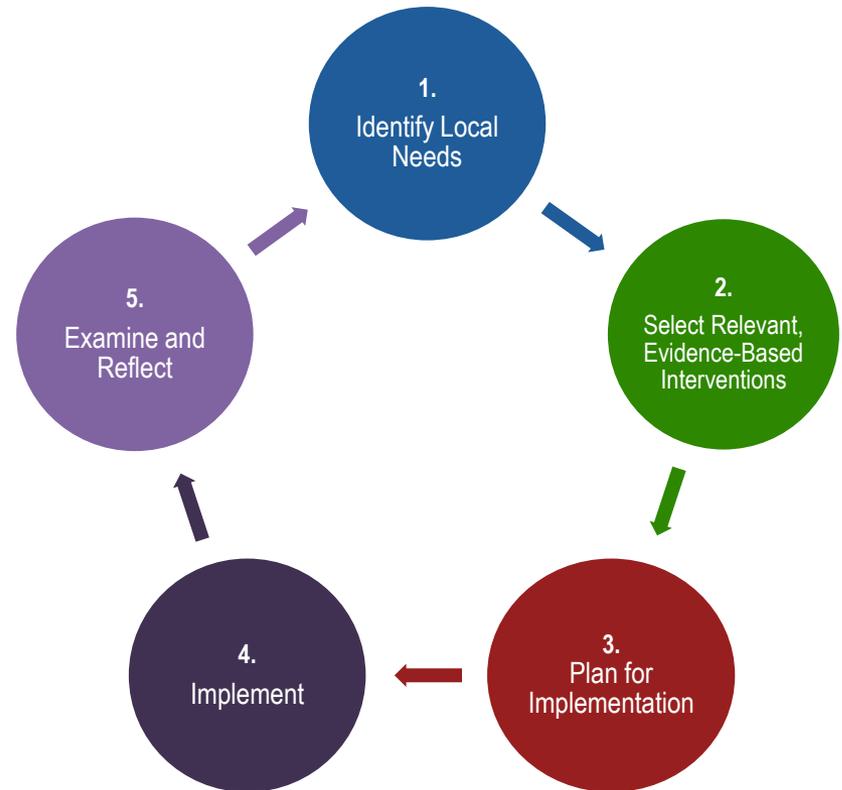


Figure. The evidence-based decision-making cycle for strengthening the effectiveness of investments.*

* Source: U.S. Department of Education. (2016). Non-Regulatory Guidance: Using Evidence to Strengthen Education Investments. <http://www2.ed.gov/policy/elsec/leg/essa/guidanceusesinvestment.pdf>

Background for Resource Review: Defining “Evidence-Based”

Section 8101(21)(A)* of the ESEA defines an evidence-based intervention (i.e., an activity or strategy) as being supported by one of four levels of evidence, ***strong evidence***, ***moderate evidence***, ***promising evidence***, or ***demonstration of a rationale***.

The first three levels of evidence are demonstrated by a statistically significant effect on improving student outcomes or other relevant outcomes:

- ***strong evidence*** is based on “at least one well-designed and well-implemented experimental study”*
- ***moderate evidence*** is based on “at least one well-designed and well-implemented quasi-experimental study”*
- ***promising evidence*** is based on “at least one well-designed and well-implemented correlational study with statistical controls for selection bias”*

The final level of evidence, ***demonstrates a rationale***, is “based on high-quality research findings or positive evaluation that such activity, strategy, or intervention is likely to improve student outcomes or other relevant outcomes; and includes ongoing efforts to examine the effects of such.”*

Disclaimer: The evidence base listed in the review of resources included in this document is based solely on a review of the study design (one component of the ESSA requirements) and while it may point to a level of evidence under ESSA, it has not been fully reviewed based on ESSA requirements. Such a review would be needed to confirm the level of evidence.

* Source: U.S. Congress. (2015). Public Law 114-95 Every Student Succeeds Act.
<https://www.congress.gov/114/plaws/publ95/PLAW-114publ95.pdf>

Framework for Resource Review

The first stage in the resource review was to use a checklist rubric with 10 items to evaluate **abstracts** of research articles that explored an intervention that was implemented in a school environment with an experimental study and **implementation tools** that focus on the school improvement process and that include guidance for implementing evidence-based practices. Resources that addressed more than half of the criteria in the rubric were reviewed further to ensure they addressed using evidence-based decision making for selecting and implementing interventions for school improvement. The topical areas summarized in the following slides are listed in the top row of the table below, followed by a description of the information that is included for each topic.

Resource	Topic & Audience (for Tools)	Identification of Local Needs	Evidence-Base for Selected Intervention / Resource	Implementation of the Selected Intervention	Data Usage During and After Implementation
Author and Year of Resource	<ul style="list-style-type: none"> • Topical area of the resource. • Audience for the tool. 	<ul style="list-style-type: none"> • How data collection is relevant to context. • Identification of strengths and gaps, and stakeholders involved in identifying local needs. 	<ul style="list-style-type: none"> • Use of studies/research to identify intervention, use of other information to identify intervention • Other contextual factors and relevance to other states/districts • If the resource is an experimental study, the type of research design and the level of evidence that this may provide. 	<ul style="list-style-type: none"> • The approach the site took in implementing the intervention including the role of the data/evidence, preparation, framework used, and fidelity of implementation. 	<ul style="list-style-type: none"> • Use of data during implementation for continuous improvement and evaluation of the intervention.

*Note: **Bold text** within the tables in the following slides is intended to highlight phases within the evidence-based decision-making cycle where a resource could be particularly relevant.*

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Resources by Topic

IMPLEMENTATION TOOLS/ RESOURCES

Implementation Tools

Resource	Topic & Audience	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Cohn (2015)</u>	<ul style="list-style-type: none"> • <i>Topic:</i> Program evaluation and continuous improvement. • <i>Audience:</i> LEAs and schools, specifically priority schools 	<ul style="list-style-type: none"> • Aimed at all schools/LEAs serving all grade levels (k-12) • School- and LEA-level “expected indicators” are identified; needs are aligned with intervention, implementation, and outcomes. 	<ul style="list-style-type: none"> • Resource includes identification of evidence-based innovations by leadership and how to articulate evidence-based problems of practice. 	<ul style="list-style-type: none"> • Handbook supports an examination of school practices compared to seven research-based principles of student and school success using an online action-planning tool called (Indistar®). 	<ul style="list-style-type: none"> • Includes suggested research-based practices and indicators that align with Principle 5: Use data to inform instruction and for continuous improvement.
<u>Delaware Department of Education (2014)</u>	<ul style="list-style-type: none"> • <i>Topic:</i> Planning for school turnaround focused on the lowest performing schools. • <i>Audience:</i> School-level stakeholders, specific to priority schools. 	<ul style="list-style-type: none"> • Aimed at lowest performing schools of all grade levels. • Includes a clear plan for identifying and addressing local needs with the inclusion of an indicator and rubric for addressing the needs of student subgroups. 	<ul style="list-style-type: none"> • Planning information emphasizes that frameworks, interventions, and leadership development must be based on evidence-based practices. 	<ul style="list-style-type: none"> • Includes 6 principals of practice to focus on school improvement. • Strategy and goal development are derived from data that demonstrates a strong sense of possibility in student growth and achievement. 	<ul style="list-style-type: none"> • Emphasizes that goals are aligned to mission and vision of the school, are tied to staff evaluations, and clearly connect to the data that is being regularly reported. • Plan provides ongoing opportunities to learn through informal and formal feedback.

Implementation Tools (cont.)

Resource	Topic & Audience	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<p><u>Player, Hitt, & Robinson, (2014)</u></p>	<ul style="list-style-type: none"> • <i>Topic:</i> Planning and performance management aimed at turnaround where efforts are directed across multiple schools, focused on all states/LEAs. • <i>Audience:</i> SEAs and LEAs, specific to low-performing schools. 	<ul style="list-style-type: none"> • SEAs/LEAs serving all levels (preK-12). • Provides needs assessment information including benefits, who can conduct it, how to conduct it, tools to use, arriving at consensus, and next steps after the assessment has been completed. 	<ul style="list-style-type: none"> • Highlights evidence that support systems, must be aligned with leadership's vision. • Encourages SEAs to prioritize resources for school turnaround to LEAs that provide readiness evidence. 	<ul style="list-style-type: none"> • A culture must exist in the LEA in which teachers/ leaders see data as a critical tool to accurately diagnose and then address student needs. 	<ul style="list-style-type: none"> • Promotes the use of data: for LEAs to understand overall trends in schools, for principals to understand and address individual teacher and classroom performance, and for teachers to monitor each child's performance intervention action plan.

Implementation Tools (cont.)

Resource	Topic & Audience	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
Redding, Dunn, & McCaul (2015)	<ul style="list-style-type: none"> • <i>Topic:</i> Planning for needs assessment that will lead to choosing interventions, with data use as a key step in planning. • <i>Audience:</i> All SEAs, LEAs, and schools. 	<ul style="list-style-type: none"> • Any SEA/LEA (preK-12) that is interested in applying for a School Improvement Grant (SIG), which includes low-performing schools. • Connects needs assessment to selection of an intervention model that is the best fit. 	<ul style="list-style-type: none"> • Provides guidance on the “Evidence-Based, Whole-School Reform Model.” 	<ul style="list-style-type: none"> • Step-by-step guidance for seven intervention models that prepare SEAs/LEAs/schools to apply for a SIG, including information on planning for specific intervention models, selecting an intervention that fits your goals and needs, and steps for implementing with guidance from the <u>2015 amended SIG regulations</u>. 	<ul style="list-style-type: none"> • Emphasizes the importance of using data to improve and evaluate programs.

Implementation Tools Bibliography

- Cohn, S. (2015). *Student and School Success Action Planning Handbook: A Guide for School Teams*. Olympia, WA: Washington State Office of Superintendent of Public Instruction. Retrieved from: <http://www.k12.wa.us/StudentAndSchoolSuccess/pubdocs/OSPIAction-PlanningHandbook.pdf>.
- Delaware Department of Education (2015). *Delaware Department of Education Turnaround Guide 2014-15 School Year*. Dover, DE: Delaware Department of Education. Retrieved from: <http://www.schoolturnaroundsupport.org/sites/default/files/resources/Turnaround-and-Priority-School-Guide-SEPT-2014.pdf>.
- Player, D., Hambrick Hitt, D., & Robinson, W. (2014). *District Readiness to Support School Turnaround: A Users' Guide to Inform the Work of State Education Agencies and Districts*. Sacramento, CA: Center on School Turnaround at WestEd. <http://centeronschoolturnaround.org/wp-content/uploads/2014/09/District-Readiness-to-Support-School-Turnaround.pdf>.
- Redding, S., Dunn, L., & McCauley, C. (2015). *School Improvement Grants: Guidance and Tools for the 2015 Amended Regulations: Maximizing the Optional Planning/Pre-Implementation Year*. Sacramento, CA : Center on School Turnaround at WestEd. <http://centeronschoolturnaround.org/wp-content/uploads/2015/03/CenteronSchoolTurnaround-SIGPlanning-20150310.pdf>.

Resources by Research Topic

SCHOOL IMPROVEMENT RESEARCH

School Improvement Research

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Kahne, Spote, De La Torre, & Easton (2008)</u>	<ul style="list-style-type: none"> Assesses improved academic performance, dropout rates, and graduation rates for students attending schools in the Chicago High School Redesign Initiative. 	<ul style="list-style-type: none"> Schools selected based on their history of small school activity, being a neighborhood school with high need factors (poverty and low academic achievement), and the quality of their proposals. 85% of students are from low-income families and underperform academically compared to the rest of the state. 	<ul style="list-style-type: none"> Hierarchical level modeling: Moderate level of evidence. Intervention and comparison groups were not randomly assigned. No information on the use of evidence to select the intervention. 	<ul style="list-style-type: none"> Provides resources and policies to create schools where limited bureaucratic regulation is experienced in order to create desirable teacher context for reform characterized by trust, collective responsibility, and teacher influence. 	<ul style="list-style-type: none"> No specific information on data use or evaluation for continuous improvement.

School Improvement Research (cont.)

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
Saunders, Goldenberg, & Gallimore (2009)	<ul style="list-style-type: none"> The broad purpose of the professional learning intervention was to lead schoolwide efforts to improve instruction and student achievement. 	<ul style="list-style-type: none"> Schools volunteered to receive the intervention. The LEA is located in Southern California, with treatment and control schools (grades K-5) that were part of the same LEA. Selected Title I schools organized and trained grade-level teams to increase test achievement by focusing on the improvement of students' classroom learning. 	<ul style="list-style-type: none"> Quasi-experimental trial: Moderate evidence. Study conducted because there is limited evidence of effectiveness to support the use of professional learning to improve student learning. 	<ul style="list-style-type: none"> The implementation of the instructional leadership teams (ILTs) and grade-level meetings, and the various phases of implementation are detailed. Approach based on the observation that students' academic needs and how to instructionally address them are seldom discussed in school settings. 	<ul style="list-style-type: none"> Formative evaluation indicated that implementation was strong in 3 of the schools and weaker in 1 school. Progress data was used to revise the implementation plan.

School Improvement Research (cont.)

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Sondergeld, Fischer, Samel, & Knaggs (2013)</u>	<ul style="list-style-type: none"> Impact of GEAR UP school reform in an urban high school on student progression into higher grades, attendance, and graduation rates. 	<ul style="list-style-type: none"> High poverty middle and high schools were awarded these grants so that they could provide services to their students. Program targets 12- and 13-year old students. All studies implemented in the same location. 	<ul style="list-style-type: none"> Quasi-experimental cohort design: Moderate evidence. Similar TRIO programs (Upward Bound and AVID) have demonstrated success. Evaluation of GEAR UP programs at the middle school level indicate that student and parent awareness of postsecondary options increases as a result of the program. 	<ul style="list-style-type: none"> Provides students with college-centered activities, parent education, and mentoring. <ul style="list-style-type: none"> Programs were not implemented with the same degree of fidelity. During implementation there was a dramatic shift that led to a sharp increase in disadvantaged students in the cohorts. 	<ul style="list-style-type: none"> Evaluation indicates that student and parent awareness of postsecondary options increases as a result of the program. <ul style="list-style-type: none"> No information regarding data use during and after the intervention.

School Improvement Research (cont.)

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Thompson, Brown, Townsend, Henry, & Fortner (2011)</u>	<ul style="list-style-type: none"> To assess the overall Race to the Top activities in order to study the impact of the interventions, and to provide insights into how to improve the activities for effectiveness. 	<ul style="list-style-type: none"> Middle, elementary, and high schools were targeted primarily because their Performance Composites fell below 60% for two or more years and local educators pointed to similar factors contributing to low performance. 	<ul style="list-style-type: none"> Non-equivalent comparison group pretest-posttest design. The intervention was not based on evidence but based on a model that helps principals understand and monitor instructional practices in a variety of content areas. 	<ul style="list-style-type: none"> An extensive program that includes an orientation session, a week-long session in July, plus five additional three-day sessions held every other month during the year. 	<ul style="list-style-type: none"> Evaluation showed that teams found leadership facilitators' assistance helpful, reactions to coaches were more mixed.

School Improvement Research Bibliography

- Kahne, J. E., Spote, S. E., De La Torre, M., & Easton, J. Q. (2008). Small high schools on a larger scale: The impact of school conversions in Chicago. *Educational Evaluation & Policy Analysis*, 30(3), 281-315.
- Saunders, W. M., Goldenberg, C. N., & Gallimore, R. (2009). Increasing achievement by focusing grade-level teams on improving classroom learning: A prospective, quasi-experimental study of Title I schools. *American Educational Research Journal*, 46(4), 1006-1033.
- Sondergeld, T.A., Fischer, J.M., Samel, A. N., & Knaggs, C. M. (2013). Evaluating the Influence of an Urban High School Reform Effort on College Readiness and Access Outcomes: A Quasi-experimental Cohort Study, *Journal of Education for Students Placed at Risk (JESPAR)*, 18:3-4, 212-232, DOI: 10.1080/10824669.2013.818371.
- Thompson, C. L., Brown, K. M., Townsend, L. W., Henry, G. T., & Fortner, C. K. (2011). *Turning Around North Carolina's Lowest Achieving Schools (2006-2010)*. Raleigh, NC: Consortium for Educational Research and Evaluation–North Carolina.

Resources by Research Topic

SCHOOL CLIMATE RESEARCH

School Climate Research

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Berg & Aber (2015)</u>	<ul style="list-style-type: none"> Impact of Social and Character Development (SACD) programs on engagement and academic competence was studied in this randomized evaluation. 	<ul style="list-style-type: none"> 83 elementary schools in 6 states were recruited with 3rd – 5th graders. Half (52%) of students were girls, represented by 43% White, 30% African American, 19% Hispanic/Latino, 7% other. 43% of households had poverty level incomes No specific needs assessment included. 	<ul style="list-style-type: none"> RCT design: Strong level of evidence. Schools were recruited and randomly assigned to treatment and control groups. Role of data/evidence not included. 	<ul style="list-style-type: none"> Universal approach focused on SACD goals including character/emotional development, violence prevention, etc. 	<ul style="list-style-type: none"> Evaluation focused on social/emotional competence, academics, and perceptions of school climate. No information on use of data for continuous improvement.
<u>Dymnic ki (2014)</u>	<ul style="list-style-type: none"> The GREAT Student Program violence prevention program examined how baseline school climate moderates effects of a RCT of the intervention. 	<ul style="list-style-type: none"> All middle schools considered at high risk of aggression and violence at multiple levels. 96% of Chicago, 42% of Durham, 47% of Georgia, and 75% of Richmond students eligible for free/reduced lunch. Violent crime committed by youth where schools are located ranged from 47 to 74 per 100,000 youth. 	<ul style="list-style-type: none"> RCT Study: Strong Level of evidence. 9 schools assigned the universal intervention, 10 assigned a combined condition, and 9 were control schools. Evidence for relevancy of approach to adolescents. 	<ul style="list-style-type: none"> Framework focused on problem-solving skills, nonviolent alternatives to conflicts, and changing norms about violence. 	<ul style="list-style-type: none"> Dosage, process, and fidelity measures that were collected during the study indicated that the intervention was implemented as intended.

School Climate Research (cont.)

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Gage, Sugai, & Lewis (2013)</u>	<ul style="list-style-type: none"> • School-wide positive behavior supports (SWPBS) focuses on increasing instruction and academic engagement. • Goal of study was to examine impact of SWPBS on school-wide academic achievement. 	<ul style="list-style-type: none"> • 150 K-12 Connecticut schools of the 936 sample schools implemented SWPBS between 2007 and 2011. • There is no information about how each SEA/LEA chose the intervention based on local needs. 	<ul style="list-style-type: none"> • Quasi-experimental study: Moderate level of evidence. • SWPBS is associated with increased positive school climate, decreased problem behaviors, and potentially, increased academic achievement. 	<ul style="list-style-type: none"> • No information regarding implementation of intervention. • Fidelity of implementation was assessed using the SET, a tool that assesses the extent to which schools are implementing SWPBS primary tier practices. 	<ul style="list-style-type: none"> • Concerns exist about the reliability of the SET scores based on the patterns of scores (i.e., meeting criteria one year and not the next). No information was provided regarding how these data were used for improvement.
<u>Wang, Couch, Rodriguez, & Lee (2015)</u>	<ul style="list-style-type: none"> • The Bullying Literature Project uses children's literature to promote social emotional and behavioral change processes in elementary students. 	<ul style="list-style-type: none"> • Students were recruited from 2 LEAs in Southern California. Both participating schools were similar in demographics with over 50% receiving a free or reduced-cost lunch, over 60% ethnic minorities/non-White). • No detailed information on the intervention being based on local needs. 	<ul style="list-style-type: none"> • Quasi-Experimental Design: Moderate level of evidence. • Different components of the intervention are supported by theories and previous research. 	<ul style="list-style-type: none"> • Children's literature, modeling, role play, and data-based decision making to improve bystander behavior. • Fidelity assessment suggested high treatment fidelity. 	<ul style="list-style-type: none"> • Before intervention, suggests conducting assessment on bullying as the first step for any bullying prevention and intervention effort.

School Climate Research Bibliography

- Berg, J. K., & Aber, J. L. (2015). *The Direct and Moderating Role of School Interpersonal Climate on Children's Academic Outcomes in the Context of Whole-School, Social-Emotional Learning Programs.* Presentation at the meeting of the Society for Research on Educational Effectiveness, Washington, DC.
- Dymnicki, A. B. (2014). Moderating effects of school climate on outcomes for the multisite violence prevention project universal program. *Journal of Research on Adolescence, 24(2)*, 383-398.
- Gage, N. A., Sugai, G., & Lewis, T. J. (2013). Academic Achievement and School-Wide Positive Behavior Interventions and Supports. Presentation at the meeting of the Society for Research on Educational Effectiveness, Washington, DC.
- Wang, C., Couch, L., Rodriguez, G. R., & Lee, C. (2015). The Bullying Literature Project: Using Children's Literature to Promote Prosocial Behavior and Social-Emotional Outcomes Among Elementary School Students. *Contemporary School Psychology, 19(4)*, 320-329.

Resources by Research Topic

TEACHER PROFESSIONAL DEVELOPMENT RESEARCH

Teacher Professional Development Research

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Cabell & Downer (2011)</u>	<ul style="list-style-type: none"> • My Teaching Partner (MTP) is a web-mediated approach that provides ongoing support for teachers to improve the quality of their interactions with children. 	<ul style="list-style-type: none"> • 161 teachers in 42 LEAs within a single mid-Atlantic state participated in the study. • All LEAs had state-funded preschool programs targeted for children who were deemed at risk for later academic difficulties (e.g., poverty and limited English proficiency). 	<ul style="list-style-type: none"> • RCT design: strong level of evidence. • Previous studies report that MTP results in higher quality teacher-child interactions for a diverse early childhood education workforce. 	<ul style="list-style-type: none"> • Teachers received 2 consecutive years of the MTP professional development program. • This article focuses on intervention outcomes rather than implementation of the intervention. 	<ul style="list-style-type: none"> • No specific information on evaluation or using data for continuous improvement of the intervention.
<u>De Kramer, Masters, O'Dwyer, Dash, & Russell (2012)</u>	<ul style="list-style-type: none"> • The e-Learning for Educators Initiative, an 8 SEA online professional development (OPD) initiative is designed to improve each SEA's capacity to deliver high-quality OPD. 	<ul style="list-style-type: none"> • Geographically, the largest group of participating teachers came from the south (50%), northeast (35%), and midwest (13%). • Almost half of the teachers who accessed the intervention live in rural and geographically isolated areas where traditional PD is more difficult to access. 	<ul style="list-style-type: none"> • RCT design: strong level of evidence. • Questions remain as to the effectiveness of OPD for improving teachers' knowledge and practices. This article evaluates whether OPD has demonstrable relationships to knowledge and practice in the context of 7th grade ELA instruction. 	<ul style="list-style-type: none"> • OPD was developed for this research collaboratively among stakeholders in the e-Learning Initiative. Workshops included theoretical information and pedagogical techniques that could be immediately implemented in the classroom. 	<ul style="list-style-type: none"> • Limited information regarding evaluation and data use for continuous improvement in this study.

Teacher Professional Development Research (cont.)

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Grigg, Kelly, Gamoran & Borman (2012)</u>	<ul style="list-style-type: none"> Science Immersion and the Full Option Science System (FOSS) Project are professional development initiatives designed to increase scientific inquiry instruction. 	<ul style="list-style-type: none"> Study took place in 80 4th and 5th grade classrooms in the LAUSD, one of the country's poorest-performing LEAs in elementary science. LAUSD local district superintendents nominated 190 schools considered to be "minimally prepared" for the initiative. 	<ul style="list-style-type: none"> RCT: strong level of evidence. Because several recent RCTs on PD have yielded no evidence of an impact on student achievement, it is necessary to investigate how PD influences teacher practice. 	<ul style="list-style-type: none"> The professional development emphasized in this intervention focuses on inquiry-based learning and on implementing curricular materials to teach learner-centered pedagogy. 	<ul style="list-style-type: none"> Follow-up data revealed some constraints such as teachers not having time to implement what they had learned. Future improvements may need to be made at the administrator level.
<u>Randel, Apthorp, Beesley, Clark, & Wang (2016)</u>	<ul style="list-style-type: none"> Classroom Assessment for Student Learning (CASL) PD was explored for its impact on math achievement and teacher knowledge of assessment practices. 	<ul style="list-style-type: none"> Public school grades 4 and 5 in Colorado that were large enough to form learning teams with recommended minimum number of members were recruited. Regional needs were expressed during preparation for and conduct of the study and focused on in this intervention. 	<ul style="list-style-type: none"> RCT: strong level of evidence. Prior research on CASL had not examined its impact on student outcomes. 	<ul style="list-style-type: none"> Teachers formed learning teams, trained and implemented CASL without researcher involvement. CASL emphasizes "assessment to benefit students." Implementation fidelity was moderate. 	<ul style="list-style-type: none"> CASL covers key areas of classroom assessment including the use of assessment data to improve student learning and assessment of accuracy and reliability.

Teacher Professional Development Research (cont.)

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
<u>Shaha, Glassett, & Copas (2015)</u>	<ul style="list-style-type: none"> The impact of teacher observations in alignment with (PD) on teacher efficacy was quantified for a commercially-available online, on-demand PD product widely used in the United States. 	<ul style="list-style-type: none"> Study done nationwide in 292 schools within 27 states, representing an estimated 187,000 students within 54% of American states. 	<ul style="list-style-type: none"> Quasi-experimental design: moderate level of evidence. Evidence suggests that online, on-demand, Internet-based PD have verified quantifiable, beneficial impacts on student performance. 	<ul style="list-style-type: none"> The PD involved a range of activities regarding teaching techniques and participative teacher/user interactive communities for collaboratively posting and downloading PD-related materials. 	<ul style="list-style-type: none"> The study includes using observational data to guide and improve teacher efficacy and positively impact classrooms and student learning outcomes.

Teacher Professional Development Bibliography

- Cabell, S. Q., & Downer, J. T. (2011). Improving Preschoolers' Language and Literacy Skills through Web-Mediated Professional Development. *NHSA Dialog*, 14(4), 316-322.
- De Kramer, R. M., Masters, J., O'Dwyer, L. M., Dash, S., & Russell, M. (2012). Relationship of online teacher professional development to seventh-grade teachers' and students' knowledge and practices in English language arts. *The Teacher Educator*, 47(3), 236-259.
- Grigg, J., Kelly, K. A., Gamoran, A., & Borman, G. D. (2012). Effects of two scientific inquiry professional development interventions on teaching practice. *Educational evaluation and policy analysis*, 0162373712461851.
- Randel, B., Apthorp, H., Beesley, A.D., Clark, T.F., & Wang, X. (2016). Impacts of professional development in classroom assessment on teacher and student outcomes. *The Journal of Educational Research*, 109(5), 491-502. DOI: 10.1080/00220671.2014.992581.
- Shaha, S. H., Glassett, K. F., & Copas, A. (2015). The Impact Of Teacher Observations With Coordinated Professional Development On Student Performance: A 27-State Program Evaluation. *Journal of College Teaching & Learning (Online)*, 12(1), 55.

Resources by Research Topic

STAKEHOLDER ENGAGEMENT RESEARCH

Stakeholder Engagement Research

Resource	Topic	Identification of Local Needs	Evidence-Base for Resource	Implementation of the Intervention	Data Use During and After Implementation
Portwood, Brooks-Nelson, & Schoeneberger (2015)	<ul style="list-style-type: none"> • Parent University is designed to engage parents in their child's education. This study explored ways to use existing program data for evaluation. 	<ul style="list-style-type: none"> • Data was gleaned from an already existing study, so there was not a needs assessment conducted that specifically supports this intervention choice. • Parent University has success with single parents, parents with lower than a high school degree, and an annual income below \$25,000. 	<ul style="list-style-type: none"> • Multilevel analyses: Promising level of evidence. • The relationship between parents and schools has consistently been shown to be related to the success of both students and schools. 	<ul style="list-style-type: none"> • Program model is based on the premise that by inviting parents to participate in their child's education, schools can enhance communication with parents and begin to build trust, which is an integral part of parent involvement. 	<ul style="list-style-type: none"> • Program data were used for evaluation and indicate the intervention is promising for improving school performance.
Seid (2016)	<ul style="list-style-type: none"> • Families and Schools Together (FAST) is a parent intervention program that strengthens family relationships and support networks. 	<ul style="list-style-type: none"> • FAST was selected for its evidence base with low-performing schools, that have a high number of students with mental health needs. • Participants are identified through screening measures that indicate mental health needs. 	<ul style="list-style-type: none"> • Correlational study using RCT data: Promising level of evidence. • Evidence shows that parent training reduces child conduct problems, improves parenting. 	<ul style="list-style-type: none"> • The approaches were adapted to reflect the values of the parents included in the study. • Quality and integrity checklists were used to determine treatment fidelity and to provide feedback. 	<ul style="list-style-type: none"> • There is no specific information on the use of data for continuous improvement in this study.

Stakeholder Engagement Bibliography

- Portwood, S. G., Brooks-Nelson, E., & Schoeneberger, J. (2015). Data and Evaluation Strategies to Support Parent Engagement Programs: Learnings from an Evaluation of Parent University. *Children & Schools*, 37(3), 145-153.
- Seid, K. (2016). The influence of native language, ethnicity, gender, and parental depression on attendance of the Families and Schools Together (FAST) program.(Doctoral Dissertation). The University of Wisconsin - Madison. Retrieved from ProQuest: 10096709.

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